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WATER SUPPLY OUTLOOK FOR NEVADA

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

NEVADA DEPARTMENT of CONSERVATION

and NATURAL RESOURCES

DIVISION of WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
APR. 1, 1977

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
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WASHINGTON, D.C.

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ALL AVERAGES ARE FOR 1958-72 PERIOD.

WATER SUPPLY OUTLOOK FOR NEVADA

THE WATER SUPPLY OUTLOOK FOR THIS SUMMER IS POOR. SNOWFALL DURING MARCH CONTINUED BELOW NORMAL IN ALL AREAS EXCEPT THE RUBY MOUNTAINS IN ELKO COUNTY. STREAMFLOW FORECASTS HAVE NOT IMPROVED AND MANY ARE LOWER THAN LAST MONTH'S.

SNOWPACK MEASUREMENTS FOR APRIL 1 INDICATE THE EASTERN SLOPE OF THE SIERRA'S HAS 25 TO 35 PERCENT OF THE 1958-72 AVERAGE. THE STORMS DURING THE MONTH ADDED ONLY SMALL AMOUNTS OF WATER TO THE SNOWPACK. RESERVOIR STORAGE REMAINS POOR IN THE SIERRA'S. THE COMBINED TOTAL OF LAKE TAHOE, BOCA, LAHONTAN, TOPAZ AND BRIDGEPORT IS 393,000 ACRE- FEET COMPARED TO AN AVERAGE OF 729,000 ACRE- FEET AND LAST YEAR'S 824,000 ACRE- FEET. STAMPEDE RESERVOIR CONTAINS 38,000 ACRE- FEET.

East Slope Sierra Nevada

April 1 snow course measurements indicate snow water contents are still minimum. Many are below last year's readings. Snowpack maximum usually occurs on the April 1 readings. This year's snowpack is 24 percent on the Walker, 33 percent on the Carson, 31 percent on the Truckee and 34 percent in the Tahoe Basin.

Lake Lucille and Rubicon #1 snow courses have a record low water content since records began in 1913. Center Mountain has the lowest readings since records began in 1922. Mount Rose, the first snow course in the Western United States, is near record low but had lower readings in 1926, 1931, 1934 and 1948. Ward Creek #2 has the second lowest reading recorded, exceeded only by 1963.

Forecasts for streamflows are less than last year for the April 1 through July 31 period. The Lake Tahoe Rise forecast, April 1 to high (assuming gates closed), is .15 feet compared to an average 1.46 feet. The Truckee River at Farad is forecast at 40,000 acre-feet compared to last year's actual flow of 59,000 acre-feet. The East Fork Carson River near Gardnerville is forecast at 40,000 acre-feet, only 22 percent of average. The West Walker River near Coleville is forecast at 45,000 acre-feet for 31 percent of average.

Reservoir storage continues to be below average on most reservoirs. Lake Tahoe contains 140,000 acre-feet, only 32 percent of average and only 1.15 feet above the rim. Stampede contains 38,000 acre-feet compared to last year's 145,000 acre-feet. Boca contains 41,000 acre-feet compared to last year's 23,000 acre-feet. Lahontan Reservoir contains 196,000 acre-feet, while Topaz has 13,000 acre-feet and Bridgeport contains 14,000 acre-feet. There is limited water in the reservoirs for supplemental supplies. This will create a heavy demand for pumping from ground water sources this season.

Humboldt

The snowpack in the Ruby Mountains and East Humboldt Range improved considerably this month. Above average snow water increases occurred during the month on the snow courses in the 7,000 to 8,000 foot zone. The high elevation snowpack is still far below average. Streamflow forecasts are similar to last month's, with near minimal flows. Reservoir storage in Rye Patch is 111,000 acre-feet as compared to 171,000 last year.

Snake River

The Owyhee and Snake River drainages now have snowpack near 50 percent of average, a slight improvement from last month. Streamflow forecasts are still far below average. Wildhorse Reservoir contains 46,000 acre-feet.

Northern Great Basin

The Surprise Valley snowpack is about 45 percent of average. Streamflows this summer will be very low. The Quinn River area has almost no snowpack. Streams in this area will flow very little this season.

Eastern and Central Nevada

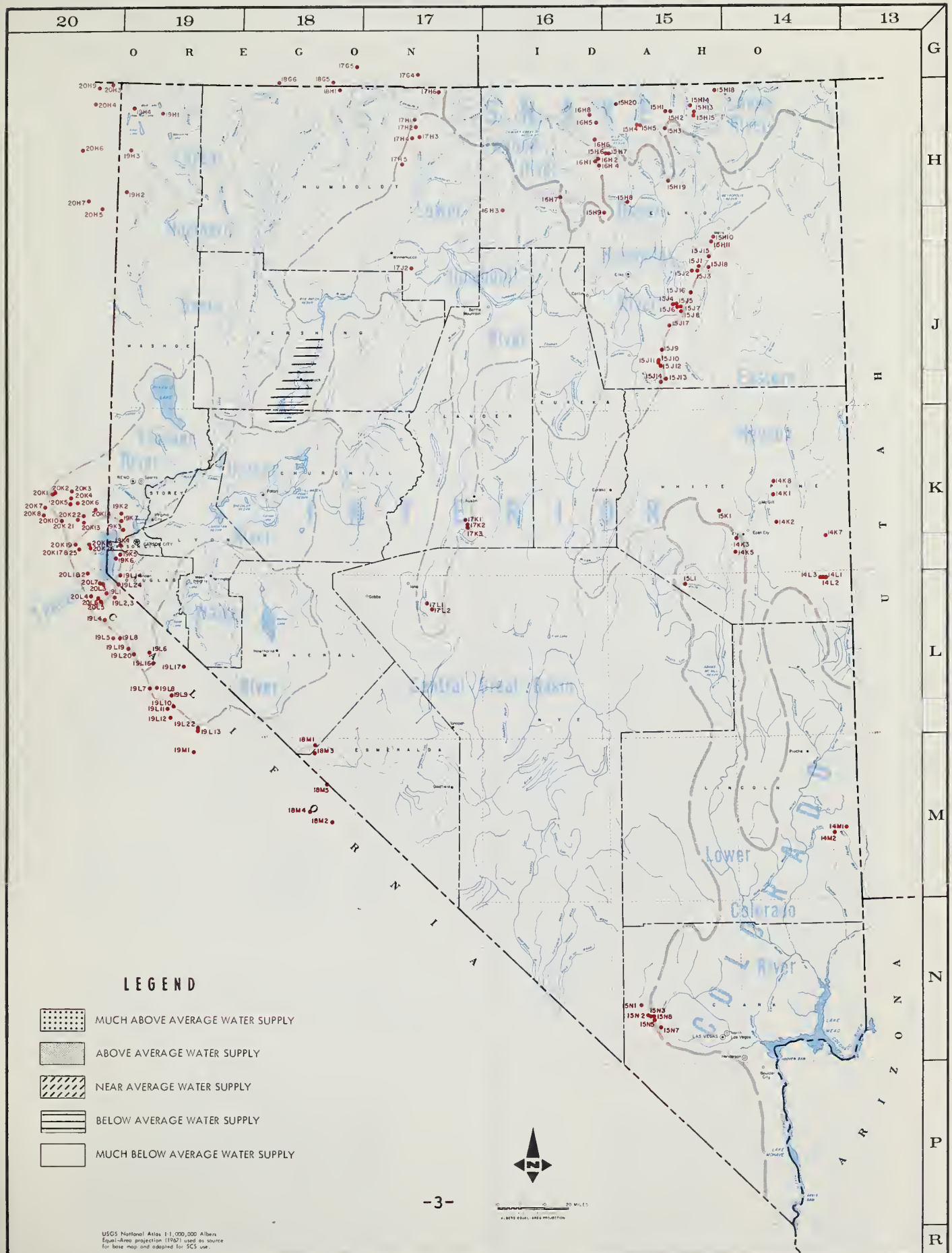
The snowpack in the Ely area is about 35 percent of average. Small streams will have a very limited flow this season. The Toiyabe Range in Central Nevada has a snowpack that's only slightly below average in the 7,000 to 8,000 foot zone. However, streamflows will be below average because of low overall snowpack.

Lower Colorado

The Virgin River at Virgin, Utah is forecast to flow 17,000 acre-feet, considerably below average.

Snowpack in the Mount Charleston area is almost non-existent, being less than 10 percent of the April 1 average. Reservoir storage in Lake Mead and Mohave is 1,707,000 and 21,429,000 acre-feet respectively, a combined total of 124 percent of average.

PROSPECTIVE WATER SUPPLY FOR NEVADA



INDEX TO NEVADA SNOW COURSES

(By Basins)

Refer to the map on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
SNAKE RIVER BASIN					
SNAKE RIVER					
15H1MA	Bear Creek	31	46N	58E	7800
15H2	Fox Creek	33	46N	58E	6800
15H13A	Goat Creek	31	46N	60E	8900
15H15A	Hummingbird Springs	6	45N	60E	8945
15H20a	Merritt Mountain	10	46N	54E	7000
15H14A	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	Red Point	15	47N	61E	7940
15H3A	76 Creek	6	44N	58E	7100
15H19a	Stag Mountain	29	41N	58E	7800

OWYHEE RIVER					
15H4MP	Big Bend	30	45N	56E	6700
16H6a	Columbia Basin	31	44N	53E	6650
16H8a	Fawn Creek	2	45N	52E	7000
15H5	Gold Creek	32	45N	56E	6600
16H1M	Jack Creek, Lower	18	42N	53E	6800
16H2A	Jack Creek, Upper	9	42N	53E	7250
16H4	Jack's Peak	28	42N	53E	8420
16H5	Laurel Draw	20	45N	53E	6700
17G4a	Louse Canyon (Oreg.)	27	40S	44E	6440
15H9MP	Taylor Canyon	35	39N	53E	6200

INTERIOR

UPPER HUMBOLDT RIVER					
15J17a	American Beauty	32	31N	58E	7800
15J12A	Corral Canyon	27	28N	57E	8500
15J1MP	Dorsey Basin	28	35N	60E	8100
15J3	Dry Creek	5	34N	60E	6500
15H7	Fry Canyon	31	43N	54E	6700
15J9MP	Green Mountain	23	29N	57E	8000
15J10	Harrison Pass #1	9	28N	57E	6600
15J11	Harrison Pass #2	16	28N	57E	7400
15J4	Lamoille #1	15	32N	58E	7100
15J5	Lamoille #2	14	32N	58E	7200
15J6M	Lamoille #3	24	32N	59E	7700
15J7	Lamoille #4	19	32N	59E	8000
15J8P	Lamoille #5	31	32N	59E	8700
15J18a	Pole Canyon	31	35N	61E	9140
15J16a	Robinson Lake	23	33N	59E	9200
15H6MP	Roded Flat	36	43N	53E	6800
15J2	Ryan Ranch	1	34N	59E	5800
15H8	Tremewan Ranch	9	39N	55E	5700
15H10P	Trout Creek, Lower	28	37N	61E	6900
15H11A	Trout Creek, Upper	4	36N	61E	8500

LOWER HUMBOLDT RIVER					
17K1	Big Creek Camp Ground	10	17N	43E	6600
17K2	Big Creek Mine	23	17N	43E	7600
17K3	Big Creek, Upper	26	17N	43E	7800
17H2	Buckskin, Lower	25	45N	39E	6700
17H1	Buckskin, Upper	11	45N	39E	8200
17L1	Corral, Lower	12	11N	40E	7500
17L2	Corral, Upper	20	11N	41E	8000
17J2	Golconda #2	22	35N	39E	6000
17H4	Granite Peak	22	44N	39E	7800
17H5	Lamance Creek	13	42N	38E	6000
17H3	Martin Creek	18	44N	40E	6700
16H3AP	Midas	18	39N	46E	7200
16H7	Toe Jam a	29	40N	50E	7700

EASTERN NEVADA					
14L1	Baker #1	29	13N	69E	7950
14L2	Baker #2	30	13N	69E	8950
14L3	Baker #3	25	13N	68E	9250
14K2	Berry Creek	26	17N	65E	9100
14K1	Bird Creek	34	19N	65E	7500
15J13	Cave Creek	25	27N	57E	7500
15J14	Hager Canyon	34	27N	57E	8000
15J15	Hoie-In-Mountain	6	35N	61E	7900
14K8	Kalamazoo Creek	34	20N	65E	7400
14K3	Murray Summit	25	16N	62E	7250
15K1	Robinson Summit	34	18N	61E	7600
14K7	Silver Creek #2	30	16N	69E	8000
14K5	Ward Mountain #2	25	15N	62E	8900

CENTRAL GREAT BASIN					
18M2	Campito Mountain (Cal.)	19	5S	35E	10200
18M5a	Chiatovich Flat	32	2S	34E	10500
15N2	Clark Canyon	8	19S	56E	9000
18M1	Montgomery Pass	4	1N	33E	7100
18M3a	Pinchot Creek	28	1N	33E	9300
18M4a	Piute Pass (Cal.)	33	4S	33E	11700
15N1	Trough Springs	23	18S	55E	8500

NORTHERN GREAT BASIN					
19H1	Bald Mountain	17	45N	21E	6720
20H5	Barber Creek (Cal.)	23	39N	16E	6500
20H6	Cedar Pass (Cal.)	12	43N	14E	7100
18G6a	Oeno Creek (Oreg.)	14	41S	34E	6000
18H1	Oisaster Peak	8	47N	34E	6500
20H3a	Oismal Swamp (Cal.)	31	48N	17E	7000
20H7	Eagle Peak (Cal.)	35	40N	15E	7200
19H3	49-Mountain	7	42N	19E	6000
19H2	Hays Canyon	1	39N	18E	6400
19H4a	Little Bally Mountain	8	45N	19E	6000
20H9	Mt. Bidwell	6	47N	16E	7200
17G5a	Oregon Canyon (Oreg.)	9	40S	40E	7240
17H6a	Quinn Ridge	9	47N	41E	6300
20H4	Reservation Creek (Cal.)	12	46N	15E	5900
18G5a	Trout Creek (Oreg.)	10	41S	38E	7800

LAKE TAHOE					
20L65TZ	Echo Peak	35	12N	17E	7800
20L5	Echo Summit (Cal.)	6	11N	18E	7450
20L7stz	Fallen Leaf (Cal.)	36	13N	17E	6300
19L2	Freel Bench (Cal.)	36	12N	18E	7300
19G6	Glenbrook #2	13	14N	18E	6900
19L3MSZ	Hagans Meadow (Cal.)	36	12N	18E	8000
20L4	Lake Lucille (Cal.)	28	12N	17E	8200
19K4MSTZ	Marlette Lake	18	15N	19E	8000
20L3	Richardsons #2 (Cal.)	6	12N	18E	6500
20L1	Rubicon #1 (Cal.)	6	13N	17E	8100
20L2	Rubicon #2 (Cal.)	6	13N	17E	7500
20K16	Tahoe City (Cal.)	6	15N	17E	6250
20K26	Tahoe City Alt. (Cal.)	7	15N	17E	6300
20K27	Tahoe City Cross (Cal.)	1	15N	16E	6750
19L1	Upper Truckee (Cal.)	21	12N	18E	6400
20K17M	Ward Creek (Cal.)	21	15N	16E	7000
20K255TZ	Ward Creek #2 (Cal.)	21	15N	16E	6750

TRUCKEE RIVER					
20K14	Boca #2 (Cal.)	28	18N	17E	5900
20K22	Brockway Summit (Cal.)	3	17N	16E	7100
20K21	Donner Park #2 (Cal.)	18	17N	16E	6000
20K10	Donner Summit (Cal.)	25	17N	14E	6900
20K7*	Fordyce Lake (Cal.)	34	18N	13E	6500
20K8*	Furnace Flat (Cal.)	10	17N	13E	6700
20K4MSTPZ	Independence Camp (Cal.)	34	19N	15E	7000
20K3	Independence Creek (Cal.)	14	19N	15E	6500
20K5	Independence Lake (Cal.)	9	18N	15E	8450
19K3	Little Valley	17	16N	19E	6300
19K2	Mt. Rose	7	17N	19E	9000
19K7	Mt. Rose Ski Area	30	17N	19E	9000
20K6	Sage Hen Creek (Cal.)	7	18N	16E	6500
20K19	Squaw Valley #2 (Cal.)	6	15N	16E	7500
20K13M	Truckee #2 (Cal.)	22	17N	16E	6400
20K2*	Webber Lake (Cal.)	29	19N	14E	7000
20K1*	Webber Peak (Cal.)	30	19N	14E	8000

CARSON RIVER					
19L5	Blue Lakes (Cal.)	30	9N	19E	8000
19L4	Carson Pass, Upper (Cal.)	22	10N	18E	8600
19K5	Clear Creek	6	14N	19E	7300
19L19a	Ebbetts Pass (Cal.)	17	8N	20E	8700
19L16a	Fish Valley, Upper (Cal.)	1	7N	22E	8050
19L06a	Poison Flat (Cal.)	25	8N	21E	7900
19L18AS	Wet Meadows Lake (Cal.)	26	9N	19E	8100
19L20a	Wolf Creek (Cal.)	35	8N	20E	8000

WALKER RIVER					
19L11	Buckeye Forks (Cal.)	20	4N	23E	8500
19L10	Buckeye Roughs (Cal.)	15	4N	23E	7900
19L12A	Center Mountain (Cal.)	4	3N	23E	9400
19L8	Leavitt Meadows (Cal.)	4	5N	22E	7200
19L17a	Lobdell Lake (Cal.)	20	7N	24E	9200
19L7M	Sonora Pass (Cal.)	1	5N	21E	8800
19M1*	Tioga Pass (Cal.)	30	1N	25E	9900
19L13	Virginia Lakes (Cal.)	5	2N	25E	9500
19L22MSZ	Virginia Lakes Ridge	32	3N	25E	9200
19L9	Willow Flat (Cal.)	21	5N	23E	8250

COLORADO

LOWER COLORADO RIVER					
15N5	Kyle Canyon	27	19S	56E	8200
15N3	Lee Canyon #2	9	19S	56E	9200
15N8	Lee Canyon #3	10	19S	56E	8500
14M1	Mathew Canyon	10	6S	70E	6000
14M2	Pine Canyon	23	6S	69E	6200
15N7	Rainbow Canyon #2	6	20S	57E	8100
15L1	White River #1	31	13N	59E	7400

LEGEND

NUMBERING SYSTEM (EXAMPLE)

19K4	Snow Course Only
19K45	Snow Course and Snow Pillow
19K4M	Snow Course and Soil Moisture
19K4A	Snow Course and Aerial Marker
19K4P	Snow Course and Storage Precipitation Gage
19K4MA	Snow Course, Soil Moisture and Aerial Marker
19K4MP	Snow Course, Soil Moisture and Precipitation Gage
19K45TZ	Snow Course, Snow Pillow and Temperature Radio Telemetered.

Lower case letters m, a, p, s, t, z, indicate no snow course, only a Soil Moisture Station, Aerial Marker, Storage Precipitation Gage, Snow Pillow, Temperature, or Radio Telemetered.

*Located on adjacent watershed

SNOW WATER DEPTHS
As percent of 1958-72 15 year average

LEGEND




- Less than 80 percent of average
- Within 20 percent of average
- More than 20 percent above average

USGS National Atlas 1:1,000,000 Albers Equal-Area projection 11967 used as source for base map and adapted for SCS use.

4-5-

SNOW WATER DEPTHS
As percent of 1958-72 15 year average

LEGEND

-  Less than 80 percent of average
 Within 20 percent of average
 More than 20 percent above average

-5-



20 MILE

USGS National Atlas 1:1,000,000 Albers
Equal-Area projection (1967) used as source
for base map and adopted for SCS use.

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: April 1, 1977

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1958-72 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
<u>TRUCKEE RIVER</u>				
Galena Creek near Steamboat, NV	April-July	2.0	45	4.4
Little Truckee River above Boca, CA 1/	April-July	12	13	89
Truckee River at Farad, CA 1/ 2/	April-July	40	15	267
Lake Tahoe Rise in Feet (Assuming gates closed) 2/	April-High	.15	10	1.46
Steamboat Creek at Steamboat	April-July	2.0	36	5.6
<u>CARSON RIVER</u>				
East Carson near Gardnerville, NV	April-July	40	22	182
West Carson at Woodfords, CA	April-July	12	23	52
Carson River near Carson City, NV	April-July	15	8	178
Carson River near Fort Churchill, NV	April-July	9	6	159
<u>WALKER RIVER</u>				
East Walker near Bridgeport, CA 1/	April-Aug.	6	9	68
West Walker below Little Walker near Coleville, CA	April-July	45	31	145
<u>SNAKE RIVER</u>				
Owyhee River near Owyhee, NV 1/	April-July	9	13	68
Owyhee River near Gold Creek, NV 1/	April-July	2	11	18
South Fork Owyhee Rv. near White Rock, NV	April-July	8	9	94
Salmon Falls Creek near San Jacinto, NV	March-July March-Sept.	23 25	29 30	80 84
<u>COLORADO RIVER</u>				
Virgin River at Virgin, UT	April-June	17	35	48

M7-L-22025M

+ 1958-1972 period.

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: April 1, 1977

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
<u>HUMBOLDT RIVER</u>				
Lamoille Creek near Lamoille, NV	April-July	8	29	28
South Fork Humboldt above Dixie Creek	April-July	16	24	66
Marys River above Hot Springs, NV	April-July	8	24	34
North Fork Humboldt at Devils Gate, NV	April-July	5	16	32
Humboldt River at Palisade, NV	April-July	20	10	193
Humboldt River at Comus, NV	April-July	12	8	149
Kingston Creek near Austin, NV	April-July	2.6	70	3.7
Little Humboldt Rv. nr Paradise Va., NV	April-July	1.0	5	18
Martin Creek near Paradise, NV	April-July	3	19	16
Reese River near Ione, NV	April-July	4.2	70	6
Rock Creek near Battle, Mountain, NV	April-July	5	26	19
<u>GREAT NORTHERN BASIN</u>				
Bidwell Creek near Fort Bidwell, CA	April-July	3.2	28	11.5
Mill Creek near Cedarville, CA	April-July	1.6	34	4.7
Deep Creek near Cedarville, CA	April-July	1.1	30	3.3
Eagle Creek near Eagleville, CA	April-July	1.7	39	4.3
Quinn River near McDermitt, NV	April-July	1	40	17
East Fork Quinn Rv. near McDermitt, NV	April-July	3	25	12
<u>EASTERN NEVADA</u>				
Franklin River near Arthur, NV	April-July	3.2	44	7.2
Steptoe Creek near Ely, NV	April-July	0.8	30	2.7
1/ Corrected for storage				
2/ Forecast issued by Truckee Basin Water Committee				

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
East Fork Carson River near Gardnerville, NV	550 - 750	1728
Carson River near Carson City, NV	400 - 600	1901
Carson River near Fort Churchill, NV	300 - 500	1730
West Walker River below Little Walker near Coleville, CA	600 - 800	1532

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River near Gardnerville, NV	200	6/10	7/20

SOIL MOISTURE MEASUREMENTS

STATION	Profile (Inches)		Soil Moisture (Inches)		
	Depth	Capacity	Date	This Year	Average +
<u>OWYHEE-HUMBOLDT BASIN</u>					
Bear Creek	72	16.9	3/30/77	11.2	11.5*
Big Bend	48	16.7	3/30/77	13.1	15.0*
Rodeo Flat	42	11.0	3/30/77	4.3	8.4*
Taylor Canyon	48	15.1	3/30/77	10.6	12.9*
Jack Creek, Lower	48	8.7	3/30/77	8.1	-
<u>TAHOE-TRUCKEE BASIN</u>					
Independence Camp	34	6.1	4/2/77	2.3	4.6*
Marlette Lake	50	3.7	3/16/77	1.2	2.9*
<u>WALKER BASIN</u>					
Sonora Pass	48	8.3	NS	-	7.5*
Virginia Lakes Ridge	40	5.0	3/29/77	1.9	2.1*

* Adjusted average

RESERVOIR STORAGE (Thousand Acre Feet) as of April 1, 1977

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
Owyhee	Wild Horse	72	46	53	23
Lower Humboldt	Rye Patch	172	111	171	105
Colorado	Mohave	1,810	1,707	1,655	1,675
Colorado	Mead	26,159	21,429	20,307	16,926
Tahoe	Tahoe	732	140	481	456
Truckee	Boca	41	30	32	15
Truckee	Stampede	220	38	145	**
Truckee	Prosser ***	30	0.1	10	8*
Carson	Lahontan	291	196	221	218
West Walker	Topaz	59	13	50	43
East Walker	Bridgeport	42	14	40	33
* Adjusted average. ** Storage began August 1, 1969. *** Flood control use allocation of 20,000 acre-feet between November 1 and April 10.					

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	574	1037	718
January 1	488	1005	714
February 1	509	1015	782
March 1	545	1048	843
April 1	550	1048	893
May 1			934

† 1958-1972 period.

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-Feet.

TOTAL USABLE CAPACITY 1,409

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>LAKE TAHOE</u>						
Echo Peak (CA)	7800	4/2/77	35	14.2	11.3	-
Echo Summit (CA)	7450	3/31/77	34	11.7	16.0	34.0
Free1 Bench (CA)	7300	3/29/77	8	3.0	2.9	10.2
Glenbrook #2	6900	3/28/77	15	4.3	6.0	11.2
Hagans Meadow	8000	3/29/77	16	5.8	6.4	16.7
Heavenly Valley	8800	3/29/77	29	10.1	13.3	-
Lake Lucille (CA)	8200	4/2/77	62	20.5	29.8	58.4
Marlette Lake	8000	4/2/77	28	9.2	10.9	21.0
Richardsons #2 (CA)	6500	3/28/77	20	6.7	8.3	15.3
Rubicon #1 (CA)	8100	4/2/77	61	18.0	31.2	48.9
Rubicon #2 (CA)	7500	4/2/77	33	11.2	14.4	29.8
Tahoe City Alternate (CA)	6250	3/28/77	0	0.0	0.0	-
Tahoe City Cross (CA)	6750	3/28/77	19	6.8	6.0	-
Upper Truckee (CA)	6400	3/29/77	6	0.2	2.6	8.1
Ward Creek #2 (CA)	7000	4/2/77	37	14.5	19.8	42.7
Ward Creek #3 (CA)	6750	4/2/77	47	16.6	20.7	-
<u>TRUCKEE RIVER</u>						
Boca #2 (CA)	5900	3/31/77	0	0.0	0.0	4.3
Brockway Summit (CA)	7100	3/30/77	13	3.4	1.6	16.2
Castle Creek	7400	3/30/77	51	15.7	22.8	-
Donner Park #2 (CA)	6000	3/31/77	17	5.9	6.5	17.2*
Donner Summit (CA)	6900	3/28/77	31	11.5	14.6	36.4
Fordyce Lake (CA)	6500	3/29/77	36	13.7	16.8	38.2*
Furnace Flat (CA)	6700	3/30/77	52	17.8	22.0	47.7*
Independence Camp (CA)	7000	4/2/77	21	7.9	10.3	22.6
Independence Creek (CA)	6500	4/2/77	13	4.5	4.4	12.9
Independence Lake (CA)	8450	4/2/77	43	14.3	22.6	42.5
Little Valley	6300	3/30/77	8	2.5	3.3	7.4*
Mount Rose	9000	4/2/77	37	15.1	15.8	35.9
Mount Rose Ski Area	8850	4/2/77	44	15.5	22.3	-
Sage Hen Creek (CA)	6500	4/2/77	17	6.1	7.7	17.7
Squaw Valley #2 (CA)	7500	4/2/77	-	19.0e	26.1	47.3
Truckee #2 (CA)	6400	3/30/77	14	4.1	5.7	14.5
Webber Lake	7000	3/29/77	31	10.0	15.3	28.6*
Webber Peak	8000	3/29/77	41	13.2	22.4	43.0
<u>CARSON RIVER</u>						
Blue Lakes	8000	3/28/77	32	9.6	14.0	36.3
Carson Pass, Upper (CA)	8600	3/28/77	26	9.8	14.6	35.5
Clear Creek	7300	3/30/77	14	4.1	5.0	12.4
Ebbetts Pass AM (CA)	8700	3/29/77	34	13.0	16.4a	25.2*
Ebbetts Pass #2 (CA)	8700	3/29/77	32	12.4	18.4	-
Fish Valley, Upper (CA)	8050	3/29/77	10	3.0	4.0a	12.7*
Poison Flat	7900	3/29/77	14	5.7	5.0	12.4*
Wet Meadows Lake AM (CA)	8050	3/29/77	19	7.0	11.5a	24.2*
Wet Meadows #2 (CA)	8050	3/29/77	27	8.7	14.8	-
Wolf Creek AM (CA)	8000	3/29/77	18	6.0	9.0a	25.8*

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>WALKER RIVER</u>						
Buckeye Roughs (CA)	7900	3/29/77	13	4.4	3.8	19.1
Center Mountain	9400	3/29/77	33	9.8	16.6	36.0
Leavitt Meadow (CA)	7200	3/29/77	0	0.0	0.0	7.0
Lobdell Lake	9200	3/29/77	14	3.8	4.6	14.9
Sawmill Ridge (CA)	8750	3/29/77	15	5.1	4.8	-
Sonora Pass (CA)	8800	3/29/77	19	6.8	6.7	23.8
Tioga Pass (CA)	9900	3/31/77	25	7.4	11.3	24.7
Virginia Lakes (CA)	9500	3/29/77	22	5.7	4.5	17.2
Virginia Lakes Ridge (CA)	9200	3/29/77	22	5.9	6.2	-
Willow Flat (CA)	9900	3/29/77	6	2.1	2.8	10.0
<u>NORTHERN GREAT BASIN</u>						
Bald Mountain AM	6720	3/29/77	1	0.3	1.2a	2.5
Barber Creek (CA)	6500	3/24/77	15	5.6	11.0	10.5
Cedar Pass (CA)	7100	3/28/77	24	8.4	18.0	15.6
Denio Creek AM (OR)	6000	3/31/77	0	0.0a	0.9a	0.2*
Disaster Peak	6500	3/30/77	5	2.0	10.4	10.8
Dismal Swamp AM (CA)	7000	3/29/77	28	7.6a	24.2	18.5*
Eagle Peak (CA)	7200	3/25/77	22	7.0	15.0	13.9
49 Mountain	6000	3/23/77	5	1.7	4.0	2.5
Hays Canyon	6400	3/30/77	1	0.1	0.0	2.5
Little Bally Mountain AM	6000	3/29/77	1	0.3a	2.6a	1.6*
Mount Bidwell (CA)	7240	3/23/77	21	6.9	23.6	-
North Star (CA)	6200	3/23/77	25	7.2	20.0	-
Oregon Canyon AM (OR)	7240	3/31/77	1	0.1a	6.1a	4.1*
Quinn Ridge AM	6300	3/31/77	0	0.0a	-	0.8*
Reservation Creek (CA)	5900	3/24/77	19	5.8	14.2	10.1
Trout Creek AM (OR)	7800	3/31/77	6	1.2	10.9a	7.3
<u>SNAKE RIVER</u>						
Bear Creek	7800	3/30/77	48	11.7	22.8	21.0
Fox Creek	6800	3/30/77	21	6.6	11.6	9.4
Goat Creek	8800	3/30/77	38	8.6	18.4	18.8
Hummingbird Springs	8945	3/30/77	46	10.4	22.9	23.6
Merritt Mountain AM	7000	3/30/77	9	2.0a	9.6a	4.2*
Pole Creek Ranger Station	8330	3/30/77	47	12.6	24.7	20.6
Red Point AM	7940	NS			-	10.3*
76 Creek	7100	3/30/77	18	4.8	12.4	11.6*
Stag Mountain AM	7700	3/30/77	4	1.0	2.2a	3.7*

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>OWYHEE RIVER</u>						
Big Bend	6700	3/30/77	14	3.0	12.0	8.1
Columbia Basin AM	6650	3/30/77	6	2.0	10.5	5.9*
Fawn Creek AM	7000	3/30/77	18	5.8	6.7	2.5*
Gold Creek	6600	3/30/77	8	0.8	8.0	4.9
Jack Creek, Lower	6800	3/30/77	14	2.9	3.8	2.5
Jack Creek, Upper	7250	3/30/77	26	5.5	9.5	10.0
Jacks Peak	8420	3/30/77	58	13.7	28.4	24.6
Laurel Draw	6700	3/30/77	22	5.6	10.9	6.5*
Louse Canyon AM (OR)	6440	3/31/77	1	0.1	8.6	1.9*
Taylor Canyon	6200	3/30/77	1	0.4	0.4	2.7
<u>UPPER HUMBOLDT RIVER</u>						
American Beauty AM	7800	3/31/77	24	7.5	7.6	7.2
Corral Canyon	8500	3/31/77	40	11.2	16.4	18.0
Dorsey Basin	8100	3/31/77	32	10.4	12.3	12.3
Dry Creek	6500	3/31/77	1	0.5	0.0	1.8
Fry Canyon	6700	3/30/77	10	2.2	10.1	5.3
Green Mountain	8000	3/31/77	31	9.7	9.6	12.2
Harrison Pass #1	6600	3/31/77	2	0.6	1.2	2.4
Harrison Pass #2	7400	3/31/77	12	3.8	3.5	4.4
Lamoille #1	7100	3/31/77	19	6.6	9.9	7.6
Lamoille #3	7700	3/31/77	28	9.3	11.6	11.6
Lamoille #5	8700	3/31/77	38	11.6	26.1	27.3
Pole Canyon	7700	3/31/77	25	8.1	-	-
Robinson Lake AM	9200	3/31/77	34	10.5	27.1	23.1
Rodeo Flat	6800	3/30/77	10	2.4	6.3	5.1
Ryan Ranch	5800	3/31/77	0	0.0	0.1	0.4
Smith Creek	7700	NS	-	-	-	-
Tent Mountain AM	7000	3/30/77	-	4.0	6.6	-
Tent Mountain AM	8350	3/30/77	24	7.8	21.6	-
Tremewan Ranch	5700	3/30/77	1	0.1	0.0	0.2
Trout Creek, Lower	6900	3/31/77	6	2.5	2.5	2.4
Trout Creek, Upper	8500	3/31/77	24	7.3	20.5	-
<u>LOWER HUMBOLDT RIVER</u>						
Big Creek Campground	6600	3/31/77	0	0.0	0.0	0.5
Big Creek Mine	7600	3/31/77	10	3.0	4.9	2.9
Big Creek, Upper	7800	3/31/77	18	5.6	7.3	5.2
Buckskin, Lower	6700	3/30/77	12	2.5	8.2	7.4
Buckskin, Upper	8200	3/30/77	11	3.1	10.5	10.4
Corral, Lower	7500	3/30/77	-	2.4e	0.0	2.2*
Golconda #2	6000	3/29/77	5	1.6	1.9	2.8
Granite Peak	7800	3/30/77	18	3.9	16.3	15.4*
Lamance Creek	6000	3/30/77	4	1.2	6.8	7.0
Martin Creek	6700	3/30/77	16	4.3	8.3	9.1
Midas AM	7200	3/30/77	2	0.6	0.0	2.7
Toe Jam AM	7700	3/30/77	10	2.1	-	6.8*

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE NAME	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average †

EASTERN NEVADA

Baker #1	7950	3/28/77	7	1.3	5.5	5.8
Baker #2	8950	3/28/77	20	4.6	12.1	13.8
Baker #3 AM	9250	3/30/77	38	9.5	10.8	15.8
Berry Creek	9100	3/30/77	32	8.4	13.0	14.5
Bird Creek	7500	3/30/77	5	.9	3.3	2.2
Hole-in-Mountain	7900	3/31/77	16	5.7	19.7	22.7
Kalamazoo Creek	7400	3/31/77	18	4.7	7.4	5.4
Mount Defiance AM	9400	3/30/77	39	9.0	15.4	-
Murray Summit	7250	3/28/77	0	0.0	0.0	1.6
Robinson Summit	7600	3/28/77	0	0.0	0.0	0.9
Silver Creek #2 AM	8000	3/30/77	18	4.5	5.2	4.9
Ward Mountain #2 AM	7400	3/30/77	16	3.7	4.5	9.3
White River #1	7400	3/29/77	0	0.0	0.0	1.3*

CENTRAL GREAT BASIN

Campito Mountain (CA)	10200	4/2/77	7	1.8	1.8	4.0*
Chiatovich Flat AM	10500	NS	-	-	-	3.9*
Clark Canyon	9000	3/31/77	NS	-	4.5	6.7
Montgomery Pass	7100	3/31/77	6	1.0	0.0	0.8*
Pinchot Creek AM	9300	NS	-	-	-	1.2*
Piute Pass AM	11700	NS	-	-	-	4.9*
Trough Springs	8500	3/31/77	NS	-	1.3	4.2*

LOWER COLORADO RIVER

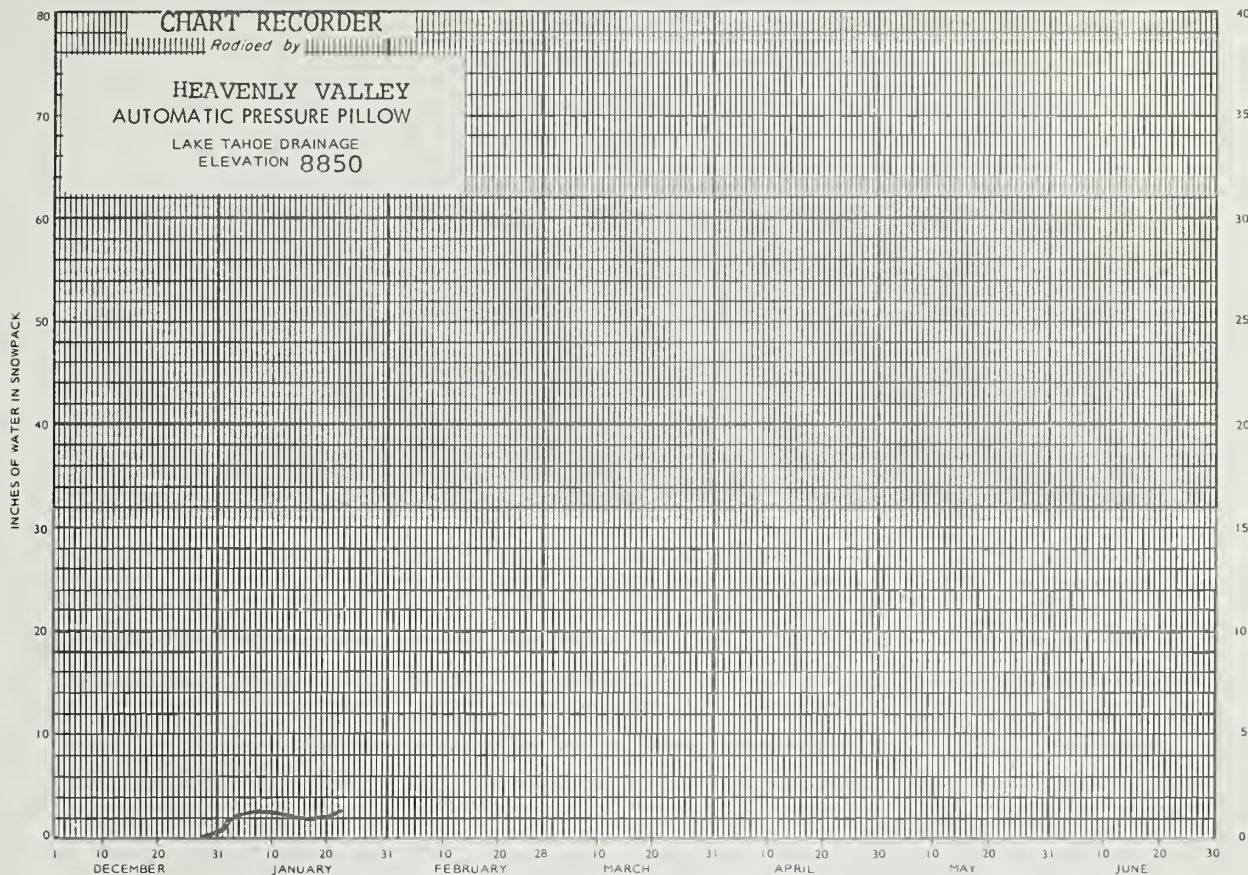
Kyle Canyon	8200	3/31/77	2	0.4	5.8	7.4
Lee Canyon #2	9000	3/30/77	2	0.6	6.2	8.0
Lee Canyon #3	8500	3/30/77	1	0.1	4.9	6.6*
Mathew Canyon	6000	3/31/77	0	0.0	0.0	0.6
Pine Canyon	6200	3/31/77	0	0.0	0.0	0.5
Rainbow Canyon #2	8100	3/31/77	9	2.4	10.8	14.1

NS No survey
e Estimate

NOTE.
All averages based on 1958-72, 15 year period. Forecast period is April 1 through July 31 unless otherwise noted.
a-Aerial marker; water content estimated. * 1958-72 adjusted average.

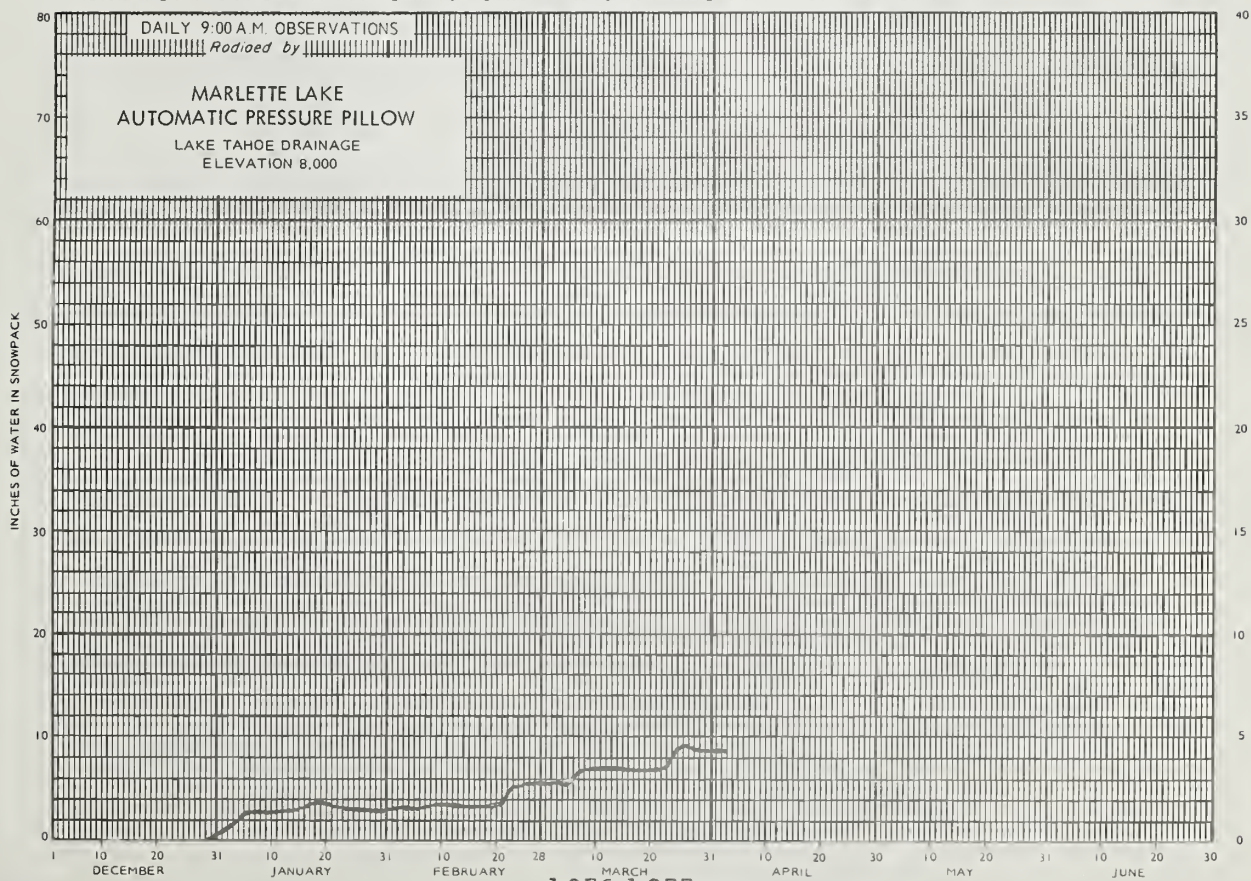
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	Percent of Average
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	4/2/77	3.4	3.5	15.5	23.9	-
Fallen Leaf	6240	4/5/77	4.6	1.2	11.4	11.9	-
Hagans Meadow	8000	3/29/77	4.8	-	12.7	-	-
Independence Camp	7000	4/2/77	3.5	2.2	10.6	14.1	-
Independence Creek	6500	4/2/77	1.3	3.2	11.0	7.9	-
Independence Lake	8450	4/2/77	4.0	-	16.7	-	-
Marlette Lake	8000	4/2/77	4.6	2.9	10.2	13.3	-
Mount Rose	9000	4/2/77	2.8	3.7	8.6	15.7	-
Tahoe City Cross	6750	3/23/77	1.8	3.5	10.6	12.3	-
Truckee #2	6400	3/30/77	2.0	4.3	8.0	9.5	-
Ward Creek #3	6750	4/2/77	4.6	6.8	20.9	30.7	-
<u>CARSON RIVER</u>							
Ebbetts Pass	8750	3/29/77	2.6	-	14.4	20.6	-
Poison Flat	7900	3/29/77	3.6	3.0	6.6	13.2	-
Wet Meadows	8050	3/29/77	2.4	-	11.1	12.1	-
<u>WALKER RIVER</u>							
Lobdell Lake	9200	3/29/77	1.4	-	4.9	-	-
Sonora Pass	8800	3/29/77	1.8	2.0	13.3	14.5	-
Virginia Lakes Ridge	9200	3/29/77	1.3	-	17.0	-	-
<u>HUMBOLDT RIVER</u>							
Corral Canyon	8500	3/31/77	7.1	-	13.3	-	-
Dorsey Basin	8100	3/31/77	4.4	2.5	11.1	-	64
Green Mountain	8000	3/31/77	5.6	1.5	13.2	7.8	-
Lamoille #3	7700	3/31/77	7.0	-	13.8	-	-
Midas	7200	3/31/77	-	-	-	-	83
Rodeo Flat	6800	3/30/77	5.0	2.2	10.0	14.5	85
Trout Creek, Lower	6900	3/31/77	2.8	-	6.5	-	52
<u>OWYHEE RIVER</u>							
Big Bend	6700	3/30/77	1.7	2.8	10.4	12.8	87
Jacks Peak	8420	3/30/77	5.9	-	21.8	-	-
Taylor Canyon	6200	-	-	1.5	-	8.5	-
Upper Jack Creek	7250	3/30/77	4.0	-	17.5	-	-
<u>SNAKE RIVER</u>							
76 Creek	7100	3/30/77	1.2	0.7	5.5	13.2	-
Bear Creek	7800	3/30/77	3.0	3.5	12.8	19.3	-
Pole Creek Ranger Station	8330	3/30/77	1.5	-	15.5	-	-
Goat Creek	8800	3/30/77	4.0	-	14.0	-	-
<u>EASTERN NEVADA</u>							
Berry Creek	-	3/30/77	-	-	13.5	-	-



1976-1977

U.S.D.A. SOIL CONSERVATION SERVICE DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION



1976-1977

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Agricultural Research Service
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- U. S. District Court - Federal Water Master
- NOAA, National Weather Service

STATE

- California Cooperative Snow Surveys
- California Department of Parks and Recreation
- California Department of Water Resources
- Colorado River Commission of Nevada
- Idaho Cooperative Snow Surveys
- Nevada Association of Conservation Districts
- Nevada Department of Conservation & Natural Resources
 - Division of Water Resources
 - Nevada State Forester
- Oregon Cooperative Snow Surveys
- Utah Cooperative Snow Surveys
- White Mountain Research Station, Univ. of California

PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas and Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Truckee-Carson Irrigation District
- Walker River Irrigation District
- Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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